Notice of Allowability	Application No.	Applicant(s)	
	10/661,262	COOGAN ET AL.	
	Examiner	Art Unit	
	Susan Hanley	1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *5/16/07*.

2. ☒ The allowed claim(s) is/are *1,3-9,11,12 and 17-19*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 2/11/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *20070516* .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Samuel DuBoff on 5/16/07.

The application has been amended as follows:

IN THE CLAIMS:

Claim 13 was canceled.

Claim 1 was replaced by the following:

-- 1. A method for sterilizing a complex fluid, comprising:

a) introducing a supply of complex fluid into a treatment zone, wherein said complex fluid is selected from the group consisting of blood products, pharmaceuticals, injectable solutions and vaccines, said complex fluid containing a pathogen comprising a bacteria and/or a virus that is responsive to light energy;

b) applying light energy to said complex fluid in said treatment zone, said light energy being supplied from an excimer, non-pulsed, non-laser light source utilizing dielectric barrier discharge that generates a substantially monochromatic light having a wavelength of between 260 nm and 310 nm;

wherein said light energy from said light source is effective to substantially excite and inactivate said pathogen while substantially preserving said complex fluid; and wherein the light source is maintained at ambient temperature. --

Claims 3-9 were replaced by the following:

-- 3. The method according to claim 1, further comprising adding a photoactive compound to said complex fluid prior to applying said monochromatic light thereto.

4. The method according to claim 1, wherein said light source includes a system for controlling temperature of said complex fluid throughout application of said monochromatic light thereto.

5. The method according to claim 1, wherein said light source generates said monochromatic light utilizing an excimer gas selected from the group consisting of XeI, Cl_2, XeBr, Br_2, XeCl, filtered XeBr, I_2 and XeF.

6. The method according to claim 1, wherein said complex fluid is a blood product and the method further comprises leukocyte reduction.

7. The method according to claim 1, wherein said complex fluid sterilization comprises the inactivation of said pathogen by disrupting one or more nucleic acids of said pathogens.

8. The method according to claim 1, wherein said complex fluid is a blood product selected from the group consisting of whole blood, plasma, platelets, packed cells and combinations thereof.

9. The method according to claim 3, wherein said complex fluid sterilization comprises excitation of the photoactive compound, wherein said excited photoactive compound is effective at inactivating said one or more pathogens; and said complex fluid is not affected by said excited photoactive compound. --

Claims 11 and 12 were replaced by the following:

-- 11. The method according to claim 1, further comprising mixing said complex fluid during said sterilization thereof.

12. A method for inactivating a nucleic acid in a pathogen that contaminates a complex fluid comprising:

a) introducing a supply of complex fluid into a treatment zone, wherein said complex fluid is selected from the group consisting of blood products, pharmaceuticals, injectable solutions and vaccines, said complex fluid containing a pathogen comprising a bacteria and/or a virus

b) adding a photoactive compound to said complex fluid; and

c) applying light energy to said complex fluid and said photoactive compound in said treatment zone, said light energy being supplied from an excimer non-pulsed, non-laser light source utilizing dielectric barrier discharge that generates a substantially monochromatic light having a wavelength less than 340 nm; wherein said light energy from said light source is effective to substantially excite said photoactive compound thereby disrupting said nucleic acid and inactivating said pathogen, while substantially preserving said complex fluid; and wherein the light source is maintained at ambient temperature. --

Claims 17-19 were replaced by the following:

-- 17. The method according to claim 12, wherein said photoactive compound is riboflavin.

18. The method according to claim 12, wherein said nucleic acid excited by said light energy from said light source is single stranded.

19. The method according to claim 12, wherein said photoactive compound is effective at inactivating pathogens with double stranded nucleic acid. --

Information Disclosure Statement

The IDS filed 2/11/2004 was again executed to correct duplicate documents and an inconsistency in initialing some references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Hanley whose telephone number is 571-272-2508. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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